

GenCore version 5.1.1.6  
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OM protein - protein search, using sw model

Run on: March 30, 2005, 19:30:30 ; Search time 72 Seconds  
(without alignments)  
886.326 Million cell updates/sec

Title: US-09-786-867C-5  
Perfect score: 893  
Sequence: 1 MTASTSQVRQNYHQDSEAA.....PRRRKRPHSIPTILIFRSP 165

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 2105692 seqs, 386760381 residues

Total number of hits satisfying chosen parameters: 2105692

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : A\_Geneseq\_16Dec04:\*  
1: Geneseqp1980s:\*  
2: Geneseqp1990s:\*  
3: Geneseqp2000s:\*  
4: Geneseqp2001s:\*  
5: Geneseqp2002s:\*  
6: Geneseqp2003as:\*  
7: Geneseqp2003bs:\*  
8: Geneseqp2004s:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	891	98.7	165	3	AAY53271 Human Onc
2	615.5	68.9	183	2	AAR71567 Human mon
3	615.5	68.9	183	4	AAB90804 Human ehe
4	615.5	68.9	183	7	AD222444 HLA-B46 T
5	615.5	68.9	183	7	AD115887 Human PP
6	615.5	68.9	183	8	ABM81295 Tumour-as
7	615.5	68.9	190	7	ADG42360 Ferritin
8	615.5	68.9	190	8	ADQ29701 Human col
9	615.5	68.9	190	8	ADP24691 PRO polyd
10	615.5	68.9	206	5	AB997273 Novel hum
11	615.5	68.9	222	6	ABR41768 Human DIT
12	615.5	68.9	362	8	ADQ82746 Recombina
13	610.5	68.4	183	7	ADN31067 Human H-c
14	580.5	65.0	180	5	ABP69305 Human pol
15	580.5	65.0	182	4	AAU27741 Mouse ful
16	580.5	65.0	227	6	ABU11456 Human MDD
17	579	64.8	165	8	ABM81021 Tumour-as
18	540	60.5	148	4	AAO04400 Human pol
19	523.5	58.6	127	5	ABP42274 Human ova
20	494	55.3	242	5	ABG32428 Human sec
21	477	53.4	173	4	AAO9630 Human gen
22	477	53.4	173	7	ADG62935 Novel hum
23	424.5	47.5	146	8	ABM80602 Tumour-as
24	421.5	47.2	373	8	ABM80723 Tumour-as
25	421	47.1	621	4	ABG28304 Novel hum

26	416.5	46.6	275	4	ABG21478	Novel hum
27	399	44.7	183	4	AAU07890	Polypepti
28	399	44.7	183	7	ADG84955	Cancer-as
29	399	44.7	713	4	ABG12069	Novel hum
30	399	44.7	713	4	ABG07849	Novel hum
31	395.5	44.3	144	8	ADO43747	Amino aci
32	392	43.9	183	6	ABR82317	Human met
33	392	43.9	201	4	ABG27400	Novel hum
34	390.5	43.7	183	5	ABU65170	Human NOV
35	390.5	43.7	183	8	ADN61991	Human nov
36	390.5	43.7	317	7	ADC31487	Human nov
37	387.5	43.4	204	6	ABB99663	Amino aci
38	379.5	42.5	178	8	ABO59224	Human gen
39	379	42.4	248	4	ABG27399	Novel hum
40	377	42.2	141	4	ABG17463	Novel hum
41	375.5	42.0	221	4	AAU07889	Polypepti
42	361	40.4	85	3	AA58474	Lung canc
43	343	38.4	199	5	ABP51378	Human MDD
44	324.5	36.3	153	6	ABU70932	Human adi
45	316	35.4	175	6	ABR64209	Angiogene

## ALIGNMENTS

RESULT 1  
AAY53271  
ID AAY53271 standard; protein; 165 AA.  
XX AC AAY53271;  
XX XX 20-JUL-2000 (first entry)  
XX DE Human oncofoetal ferritin 1 protein sequence.

Human; oncofoetal ferritin 1; OFP1; ferritin; transplantation;  
pathological pregnancy; breast cancer; cytostatic; immunosuppressive;  
contraceptive; abortive; nontropic; vaccine; immunisation; cancer;  
transplant rejection; autoimmune disease; fertilisation; diagnosis;  
in vitro fertilization; IVP; hepatoblastoma; Hodgkin's lymphoma;  
leukaemia; non-Hodgkin's lymphoma; embryonal tumour; Down's Syndrome;  
spontaneous abortion; miscarriage; premature contraction; toxemia;  
premature delivery.

XX OS Homo sapiens.

XX PN WO200015788-A2.

XX PD 23-MAR-2000.

XX PF 08-SEP-1999; 99WO-IL0000485.

XX PR 11-SEP-1998; 98IL-00126181.

XX PA (GARD-) GARDINO INVESTMENT NV.

XX PI Moroz C;

XX DR WPI; 2000-271427/23.

XX DR N-PSDB; AAA13647.

PT DNA sequence coding for oncofoetal ferritin 1 protein, useful for immunizations against breast cancer, for enhancing fertilization rates during in vitro fertilization treatment and for use as a growth factor of bone-marrow progenitor cells.

XX Example 7; Fig 5; 66pp; English.

CC The present sequence represents the human oncofoetal ferritin 1 (OFP1) protein. OFP1 has cytostatic, immunosuppressive, contraceptive, abortive and nontropic activities, and can be used as a vaccine. Compositions comprising the expression vector containing an OFP1 coding sequence, and the OFP1 protein, are useful: (a) for immunisations against cancer,

CC especially breast cancer; (b) in the treatment of transplant rejections,  
 CC autoimmune diseases, pathological pregnancies; (c) for enhancing  
 CC fertilisation rates during in vitro fertilisation (IVF) treatment; and  
 CC (d) for use as a growth factor of bone-marrow progenitor cells such as  
 CC granulocyte monocytes. The OPFI nucleotide sequence is useful for  
 CC diagnosing cancer such as breast cancer, hepatoblastoma, leukaemia,  
 CC Hodgkin's and non-Hodgkin's lymphomas and embryonal tumours, Down's  
 CC syndrome, and pathological pregnancies such as spontaneous abortion and  
 CC miscarriage, premature contractions, toxemia or premature delivery  
 XX  
 SQ Sequence 165 AA;

Query Match 98.7%; Score 881; DB 3; Length 165;  
 Best Local Similarity 98.8%; Pred. No. 6.4e-90;  
 Matches 163; Conservative 1; Mismatches 1; Indels 0; Gaps 0;  
 QY 1 MTTASTSQVRQYHODSEAAINRQINLELYASYVYLSMSYFFDRDDVALKNFAKFIHQHS 60  
 DB 1 MTTASTSQVRQYHODSEAAINRQINLELYASYVYLSMSYFFDRDDVALKNFAKFIHQHS 60  
 QY 61 HEERQHAELKMLQNGRGRIFLQDIKKPDCDDWESGLNAMECALHLEKNVNSLLEFPPS 120  
 DB 61 HEERQHAELKMLQNGRGRIFLQDIKKPDCDDWESGLNAMECALHLEKNVNSLLEFPPS 120  
 QY 121 PISPSPCSWHYHTNRPQPHLHRRPRKPHSIPPTILIFRSP 165  
 DB 121 PISPSPCSWHYHTNRPQPHLHRRPRKPHSIPPTILIFRSP 165

## RESULT 2

AAR71567  
 ID AAR71567 standard; protein; 183 AA.

XX AAR71567;  
 AC  
 XX  
 DT 01-NOV-1995 (first entry)  
 XX Human monocyte growth factor.  
 DE  
 XX Monocyte growth factor; human; lung; cancer cell line;  
 KW cellular immune function; macrophage.  
 KW  
 XX Homo sapiens.  
 OS  
 XX JP07031482-A.  
 PN  
 XX  
 PD 03-FEB-1995.  
 XX  
 PF 21-JUL-1993; 93JP-00200129.  
 XX  
 PR 21-JUL-1993; 93JP-00200129.  
 XX

PA (LIFE-) ZH LIFE TECHNOLOGY KENKYUSHO.  
 XX  
 DR WPI; 1995-109536/15.  
 DR N-PSDB; AQ85979.  
 XX

PT Recombinant human monocyte growth factor and its coding DNA - useful for  
 PT stimulation of cellular immune function and macrophage.  
 XX  
 PS Claim 1; Page 2; 12pp; Japanese.

XX The amino acid sequence of a novel monocyte growth factor. The protein  
 CC was isolated from a human lung cancer cell line, T3M-30Lu (FERM B3120).  
 CC The sequence of the protein was determined by amino acid sequencing  
 CC following cleavage of the purified protein by V8 protease. The gene  
 CC encoding this protein can be used to produce recombinant monocyte growth  
 CC factor which can be used for stimulation of cellular immune function and  
 CC macrophages  
 XX

SQ Sequence 183 AA;

Query Match 68.9%; Score 615.5; DB 2; Length 183;  
 Best Local Similarity 84.6%; Pred. No. 3.7e-60;  
 Matches 121; Conservative 3; Mismatches 6; Indels 13; Gaps 2;

Best Local Similarity 84.6%; Pred. No. 3.7e-60;  
 Matches 121; Conservative 3; Mismatches 6; Indels 13; Gaps 2;  
 QY 1 MTTASTSQVRQYHODSEAAINRQINLELYASYVYLSMSYFFDRDDVALKNFAKFIHQHS 60  
 DB 1 MTTASTSQVRQYHODSEAAINRQINLELYASYVYLSMSYFFDRDDVALKNFAKFIHQHS 60  
 QY 61 HEERQHAELKMLQNGRGRIFLQDIKKPDCDDWESGLNAMECALHLEKNVNSLLEFPPS 120  
 DB 61 HEERQHAELKMLQNGRGRIFLQDIKKPDCDDWESGLNAMECALHLEKNVNSLLEFPPS 120  
 QY 121 PISPSPCSWHYHTNRPQPHLH 143  
 DB 119 -----HKLATDKNDP--HL 130

## RESULT 3

AAB90804  
 ID AAB90804 standard; protein; 183 AA.

XX AAB90804;  
 AC  
 XX  
 DT 15-JUN-2001 (first entry)  
 XX Human shear stress-response protein SEQ ID NO: 108.  
 DE Human; shear stress-response protein; vascular disease; arteriosclerosis.  
 KW  
 XX Homo sapiens.  
 OS  
 XX WO200125427-A1.  
 PN  
 XX  
 PD 12-APR-2001.  
 XX  
 PF 02-OCT-2000; 2000WO-JP006840.  
 XX  
 PR 01-OCT-1999; 93JP-00280976.  
 XX

PA (KYOW) KYOWA HAKKO KOGYO KK.  
 PA (NOJII) NOJIMA H.  
 XX

PI Nojima H, Yoshigae H, Obayashi M, Ota T, Kawabata A, Sakurada K;  
 PI Kuga T, Sekine S, Nakamura Y, Sugano S;  
 XX

DR WPI; 2001-266308/27.  
 DR N-PSDB; AAH02927.

XX DNA sequences, proteins encoded by them and antibodies against them  
 PT useful in diagnosis and treatment of vascular disease caused by  
 PT arteriosclerosis.  
 XX

PS Claim 60; Page 539-540; 678pp; Japanese.

XX The present invention provides the protein and coding sequences of a  
 CC number of human shear stress response proteins. These are useful in the  
 CC diagnosis, treatment and screening of vascular diseases caused by  
 CC arteriosclerosis, including heart failure, post-PTCA restenosis and  
 CC hypertension  
 XX

SQ Sequence 183 AA;

Query Match 68.9%; Score 615.5; DB 4; Length 183;  
 Best Local Similarity 84.6%; Pred. No. 3.7e-60;  
 Matches 121; Conservative 3; Mismatches 6; Indels 13; Gaps 2;

QY 1 MTTASTSQVRQYHODSEAAINRQINLELYASYVYLSMSYFFDRDDVALKNFAKFIHQHS 60  
 DB 1 MTTASTSQVRQYHODSEAAINRQINLELYASYVYLSMSYFFDRDDVALKNFAKFIHQHS 60  
 QY 61 HEERQHAELKMLQNGRGRIFLQDIKKPDCDDWESGLNAMECALHLEKNVNSLLEFPPS 120  
 DB 61 HEERQHAELKMLQNGRGRIFLQDIKKPDCDDWESGLNAMECALHLEKNVNSLLEFPPS 120